

5/24

SPLIT

| | | | |
|-----------------------------|--|--------------|-----------|
| DART AEROSPACE LTD | | Work Order: | 23577# |
| Description: Wheel Assembly | | Part Number: | D3233-041 |
| Dwg: D3233 Rev. B | | Qty: | 8/13 |
| Ref: | | Page 1 of 1 | |

| Step | Location | Procedure | By | Date | Qty | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-------------|--|---------|-------------|-------------|-------|----|---------|--------------|--------|---|---------|---------------------|---------|----|---------|------------|---------|----|-----------|------------------------|--------|----|------------|-------------------------------|--------|----|---------|-----------|--------|--|--|--|
| 1 | DC | Issue Traveler | HJ | 05.06.16 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | MFA | Pick: <table border="1"> <thead> <tr> <th>Qty</th> <th>Part Number</th> <th>Description</th> <th>Batch</th> </tr> </thead> <tbody> <tr> <td>21</td> <td>D3233-7</td> <td>Shaft Sleeve</td> <td>B23002</td> </tr> <tr> <td>1</td> <td>D3233-9</td> <td>Tire & Rim Assembly</td> <td>B23003B</td> </tr> <tr> <td>21</td> <td>D3233-5</td> <td>Hub Sleeve</td> <td>B23001B</td> </tr> <tr> <td>42</td> <td>NKI 30/20</td> <td>Bearing & Inner Sleeve</td> <td>M17346</td> </tr> <tr> <td>84</td> <td>Shim Stock</td> <td>0.004" thick Brass Shim Stock</td> <td>M17235</td> </tr> <tr> <td>42</td> <td>35x45x7</td> <td>Axel Seal</td> <td>M17346</td> </tr> </tbody> </table> or CR 35x45x7 HMS4 R | Qty | Part Number | Description | Batch | 21 | D3233-7 | Shaft Sleeve | B23002 | 1 | D3233-9 | Tire & Rim Assembly | B23003B | 21 | D3233-5 | Hub Sleeve | B23001B | 42 | NKI 30/20 | Bearing & Inner Sleeve | M17346 | 84 | Shim Stock | 0.004" thick Brass Shim Stock | M17235 | 42 | 35x45x7 | Axel Seal | M17346 | | | |
| Qty | Part Number | Description | Batch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | D3233-7 | Shaft Sleeve | B23002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | D3233-9 | Tire & Rim Assembly | B23003B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | D3233-5 | Hub Sleeve | B23001B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 42 | NKI 30/20 | Bearing & Inner Sleeve | M17346 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 84 | Shim Stock | 0.004" thick Brass Shim Stock | M17235 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 42 | 35x45x7 | Axel Seal | M17346 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | MFA | Press out bearings that are supplied with D3233-9 wheel and discard them. | CPL | 05/06/23 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | MFA | Cut shims and assemble as per Dwg D3233 | CPL | 05/06/23 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | MFA | Spray inside hub and bearing with LPS-3 & block hole with a clean dry rag for storage. | CPL | 05/06/23 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | QC5 | Inspect work to Step 5 | J | 05-06-23 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | ST | Identify and Stock | CPL | 05.07.11 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | AC | Cost / part: 208.35 | AR | 05/07/25 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DC | Close W/O 16.18 Inspect Level 21 | HJ | 05/07/12 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Rev | Date | Change | Revised By | Approved |
|-----|----------|---------------|------------|----------|
| A | 05.01.12 | New issue | KJ/JLM | |
| B | 05.03.03 | Made in house | KJ/JLM | |

RELEASED
J/05.03.15

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Mfg / Design Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|----------------------------------|----------------|---------------------------|------------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Design Mgr | Approval QC Inspector |
| | | | Initial Design Mgr | Action Description Design Mgr | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

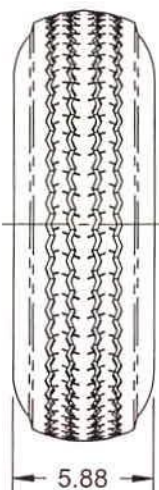
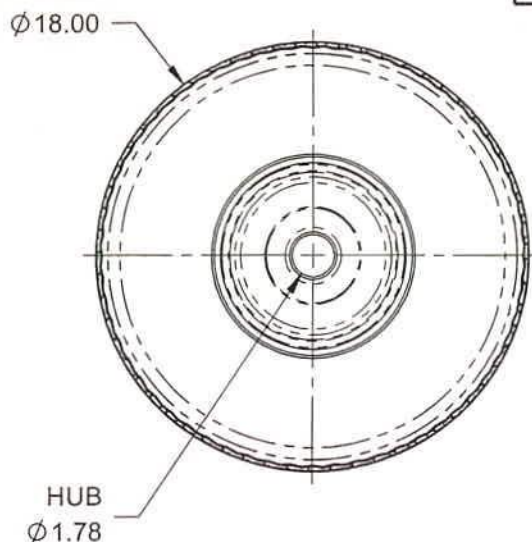
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



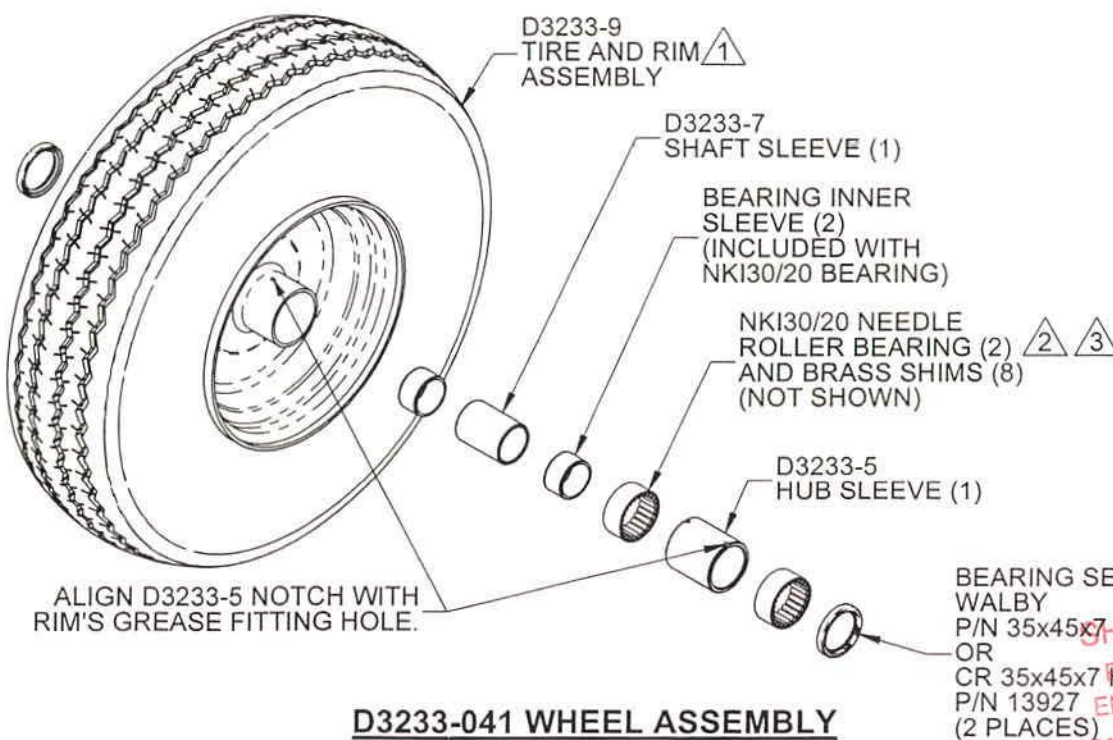
| | | | |
|------------------|----------------|---|------------------------|
| DESIGN 13 | DRAWN BY 13 | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED 7 | APPROVED 13 | DRAWING NO. D3233 | REV. B SHEET 1 OF 3 |
| DATE 05.03.08 | | TITLE WHEEL ASSEMBLY | SCALE 1:1 |
| A | 05.02.18 | NEW ISSUE | |
| B | 05.03.08 | ADDED BEARING SEALS | |



RELEASED
05/05/04

| WHEEL SPECIFICATIONS | | |
|-------------------------------------|----------------------|------------------------|
| SIZE | MAXIMUM LOAD | MAXIMUM INFLATION LOAD |
| TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0 | 910 LBS (RANGE C) | 90 PSI* |

* MANUFACTURER'S RECOMENDATIONS
ARE 75 PSI FOR HIGH SPEED USE.



D3233-041 WHEEL ASSEMBLY

NOTES:

- 1) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

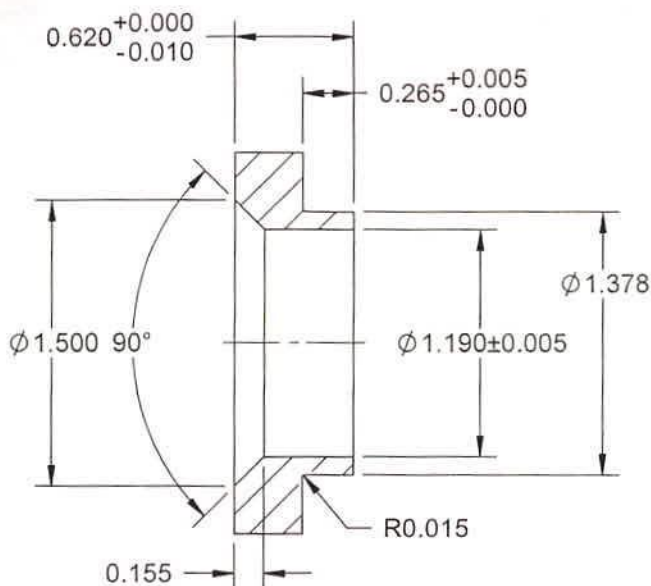
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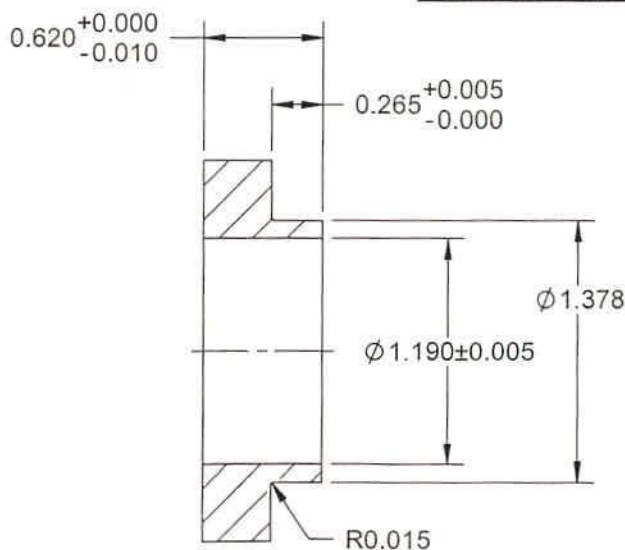
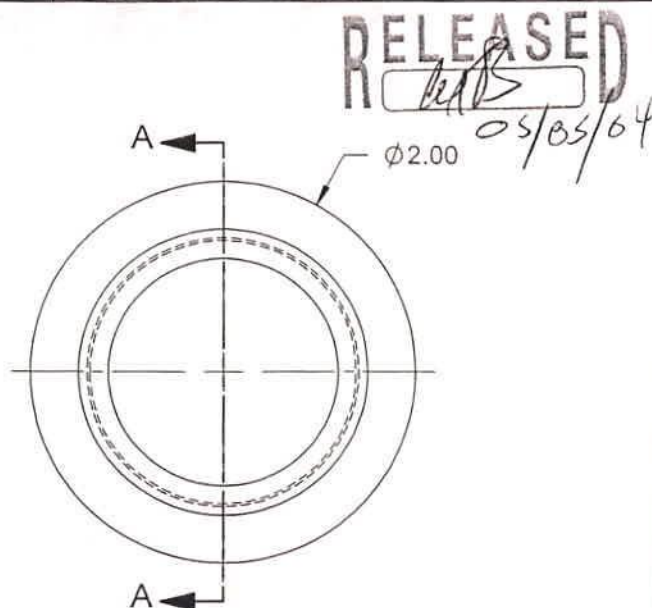


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| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3233 | REV. B SHEET 2 OF 3 |
| DATE 05.03.08 | TITLE WHEEL ASSEMBLY | | SCALE 1:1 |



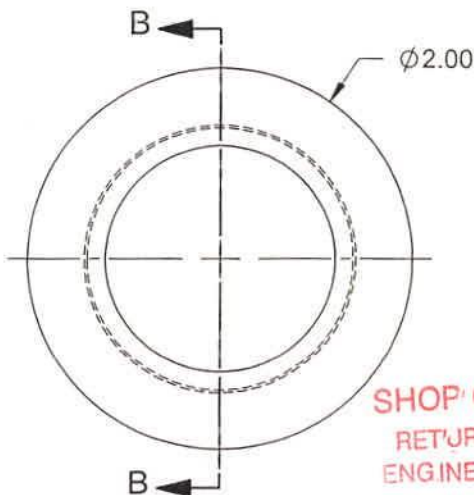
SECTION A-A

D3233-1 INSIDE WASHER



SECTION B-B

D3233-3 OUTSIDE WASHER



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NOTES:

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

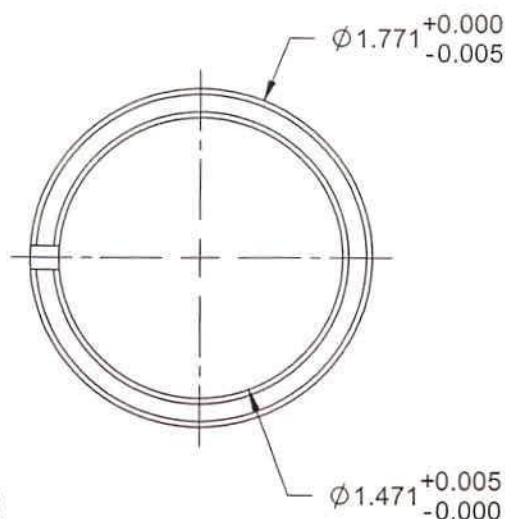
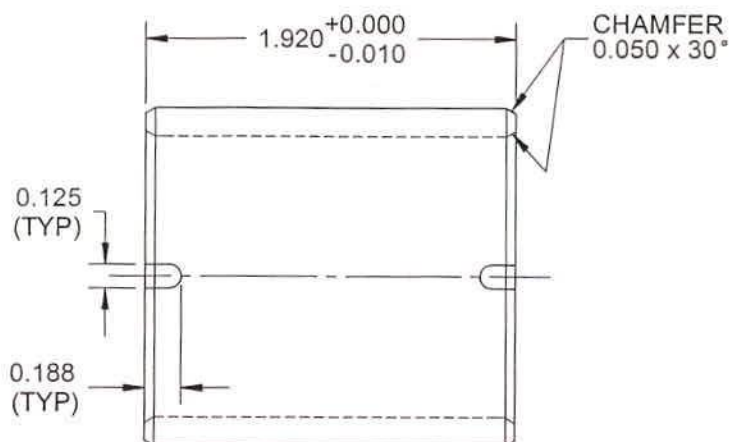
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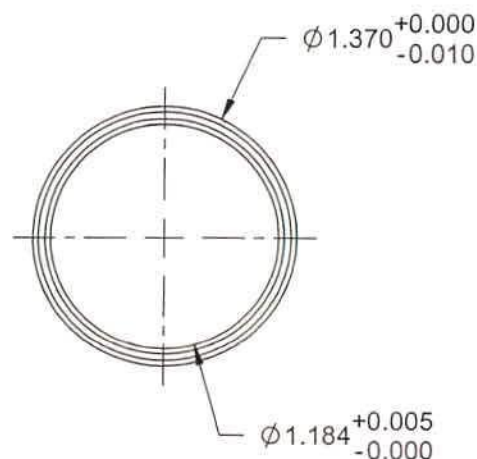
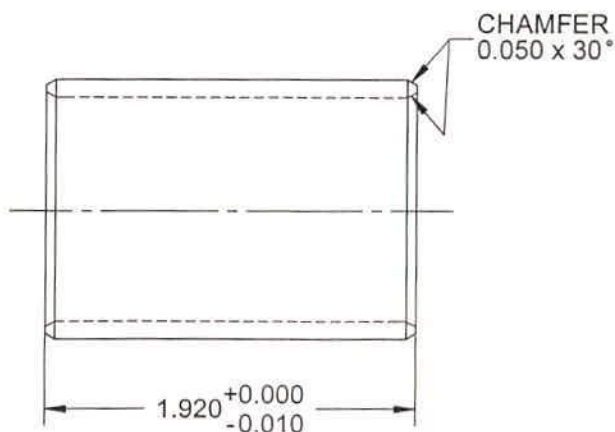


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| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3233 | REV. B SHEET 3 OF 3 |
| DATE 05.03.08 | | TITLE WHEEL ASSEMBLY | SCALE 1:1 |

RELEASED
[Signature]
05/05/04



D3233-5 HUB SLEEVE



D3233-7 SHAFT SLEEVE

NOTES:

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS
(REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

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WORK ORDER

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Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Jun 16, 2005
08:04 am

Work Order No : 0023577
Project Name : D3233-041
Project For : WK524
Work Order Type : Main
Main WO Number :
House Part Number : D3233-041
Description : Wheel Assembly
Manufactured : Yes
Amount Req'd : 8
Amount Done : 0
Start Date : 06-15-05
Est Finish Date : 06-17-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Mark Up : 0.000%
Actual Mark Up : 0.000%
\$0 Posted to Finished Goods

| | Estimated | Actual | Var. % | Posted | To Post |
|---------------------|-----------|--------|--------|--------|---------|
| Material Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Engineering Hours : | 0.00 | 0.00 | 0.00 | | |
| Engineering Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Production Hours : | 0.00 | 0.00 | 0.00 | | |
| Production Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Packaging Hours : | 0.00 | 0.00 | 0.00 | | |
| Packaging Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| OverHead Hours : | 0.00 | 0.00 | 0.00 | | |
| OverHead Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CNC Hours : | 0.00 | 0.00 | 0.00 | | |
| CNC : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Misc. Hours : | 0.00 | 0.00 | 0.00 | | |
| Misc. : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Burden : | 0.00 | 0.00 | 0.00 | | |
| Total Cost : | 0.00 | 0.00 | 0.00 | | |
| Mark up : | 0.000 | 0.000 | | | |
| Selling Cost : | 0.00 | 0.00 | | | |

| | | |
|--------------------------|-----------|--------|
| | Estimated | Actual |
| Labour Hrs/Amount Done : | 0.00 | 0.00 |
| Profits/ (Loss) : | 0.00 | 0.00 |